ATTACHMENT A

Claims 1 - 20: (Cancelled)

21. (Previously presented) A process for preparing a catalyst solid for olefin polymerization by contacting, without any isolation of an intermediate,

(A) at least one organic transition metal compound;

(B) at least one organometallic compound of formula (V)

$$M^1 (R^1)_r (R^2)_s (R^3)_t \qquad (V)$$

where

M^1 is an alkali metal, an alkaline earth metal, or a metal of group 13 of the Periodic Table;

R^1 is hydrogen, C_1-C_{10}-alkyl, C_6-C_{15}-aryl, halo-C_1-C_{10}-alkyl, halo-C_6-C_{15}-aryl, C_7-C_{40}-arylalkyl, C_7-C_{40}-alkylaryl, C_1-C_{10}-alkoxy, halo-C_7-C_{40}-alkylaryl, halo-C_7-C_{40}-arylalkyl, or halo-C_1-C_{10}-alkoxy;

R^2 and R^3 are each hydrogen, halogen, C_1-C_{10}-alkyl, C_6-C_{15}-aryl, halo-C_1-C_{10}-alkyl, halo-C_6-C_{15}-aryl, C_7-C_{40}-arylalkyl, C_7-C_{40}-alkylaryl, C_1-C_{10}-alkoxy, halo-C_7-C_{40}-alkylaryl, halo-C_7-C_{40}-arylalkyl, or halo-C_1-C_{10}-alkoxy;

r is an integer from 1 to 3; and

s and t are integers from 0 to 2, where the sum r+s+t corresponds to the valence of M^1;

(C) at least one organic compound comprising at least one functional group comprising active hydrogen, wherein the functional group is selected from the groups consisting of hydroxyl group, primary and secondary amino groups, mercapto groups, silanol

groups, carboxyl groups, amido groups, and imido groups;

(D) at least one Lewis base; and

(E) at least one support.

22. (Previously presented) The process for preparing a catalyst solid for olefin polymerization as claimed in claim 21, wherein the component (B) is a mixture of at least two different organometallic compounds.

23. (Previously presented) The process for preparing a catalyst solid for olefin polymerization as claimed in claim 22, wherein the component (B) is a mixture of at least one aluminum-containing organometallic compound and at least one boron-containing organometallic compound.

24. (Previously presented) The process for preparing a catalyst solid for olefin polymerization as claimed in claim 22, wherein the component (B) comprises at least two different aluminum-containing organometallic compounds.

25. (Previously presented) The process for preparing a catalyst solid for olefin polymerization as claimed in claim 21, wherein the organic compound of component (C) comprises at least one hydroxyl group.

26. (Previously presented) The process for preparing a catalyst solid for olefin polymerization as claimed in claim 25, wherein the component (C) is a compound of formula (VI)

$$(R^4)_x—A—(OH)_y \qquad (VI)$$

where

A is an atom of group 13, 14 or 15 of the Periodic

Table, or a group comprising from 2 to 20 carbon atoms;

R^4 are identical or different, and are each independently of one another, hydrogen, halogen, C_1-C_{20}-alkyl, C_1-C_{20}-haloalkyl, C_1-C_{10}-alkoxy, C_6-C_{20}-aryl, C_6-C_{20}-haloaryl, C_6-C_{20}-aryloxy, C_7-C_{40}-arylalkyl, C_7-C_{40}-haloarylalkyl, C_7-C_{40}-alkylaryl, C_7-C_{40}-haloalkylaryl, or $OSiR_3^5$; where

R^5 are identical or different, and are each independently of one another, hydrogen, halogen, C_1-C_{20}-alkyl, C_1-C_{20}-haloalkyl, C_1-C_{10}-alkoxy, C_6-C_{20}-aryl, C_6-C_{20}-haloaryl, C_6-C_{20}-aryloxy, C_7-C_{40}-arylalkyl, C_7-C_{40}-haloarylalkyl, C_7-C_{40}-alkylaryl, or C_7-C_{40}-haloalkylaryl;

y is at least 1; and

x is an integer from 0 to 41.

27. (Previously presented) The process for preparing a catalyst solid for olefin polymerization as claimed in claim 23, wherein the component (B) comprises at least two different aluminum-containing organometallic compounds.

28. (Previously presented) The process for preparing a catalyst solid for olefin polymerization as claimed in claim 27, wherein the organic compound of component (C) comprises at least one hydroxyl group.

29. (Previously presented) The process for preparing a catalyst solid for olefin polymerization as claimed in claim 28, wherein the component (C) is a compound of formula (VI)

$$(R^4)_x—A—(OH)_y \qquad (VI)$$

where

A is an atom of main group 13, 14 or 15 of the Periodic Table, or a group comprising from 2 to 20 carbon atoms;

R^4 are identical or different, and are each independently of one another, hydrogen, halogen, C_1-C_{20}-alkyl, C_1-C_{20}-haloalkyl, C_1-C_{10}-alkoxy, C_6-C_{20}-aryl, C_6-C_{20}-haloaryl, C_6-C_{20}-aryloxy, C_7-C_{40}-arylalkyl, C_7-C_{40}-haloarylalkyl, C_7-C_{40}-alkylaryl, C_7-C_{40}-haloalkylaryl, or $OSiR_3^5$, where

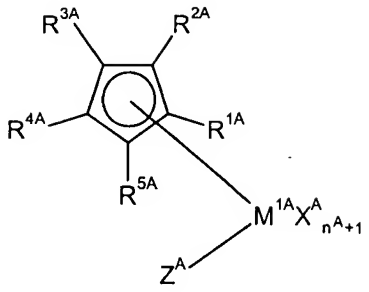
R^5 are identical or different, and are each independently of one another, hydrogen, halogen, C_1-C_{20}-alkyl, C_1-C_{20}-haloalkyl, C_1-C_{10}-alkoxy, C_6-C_{20}-aryl, C_6-C_{20}-haloaryl, C_6-C_{20}-aryloxy, C_7-C_{40}-arylalkyl, C_7-C_{40}-haloarylalkyl, C_7-C_{40}-alkylaryl, or C_7-C_{40}-haloalkylaryl;

y is at least 1; and

x is an integer from 0 to 41.

30. (Previously presented) The process for preparing a catalyst solid for olefin polymerization as claimed in claim 28, wherein the component (A) comprises at least one cyclopentadienyl-type ligand.

31. (Previously presented) The process for preparing a catalyst solid for olefin polymerization as claimed in claim 21, wherein the component (A) is of formula (I)



(I)

wherein

M^{1A} is titanium, zirconium, hafnium, vanadium, niobium, tantalum, chromium, molybdenum or tungsten, or an element of group 3 or lanthanides of the Periodic Table;

X^A are identical or different, and are each independently of one another, fluorine, chlorine, bromine, iodine, hydrogen, C_1-C_{10}-alkyl, C_2-C_{10}-alkenyl, C_6-C_{15}-aryl, C_7-C_{40}-alkylaryl, C_7-C_{40}-arylalkyl, $-OR^{6A}$, or $-NR^{6A}R^{7A}$, or two X^A radicals are joined to for a substituted or unsubstituted diene ligand;

R^{6A} and R^{7A} are identical or different, and are each independently of one another, C_1-C_{10}-alkyl, C_6-C_{15}-aryl, C_7-C_{40}-arylalkyl, C_7-C_{40}-alkylaryl, fluoroalkyl, fluoroaryl, wherein the C_7-C_{40}-arylalkyl or C_7-C_{40}-alkylaryl comprise from 1 to 19 carbon atoms in the alkyl radical and from 6 to 21 carbon atoms in the aryl radical;

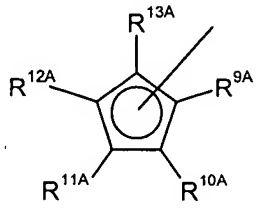
n^A is 1, 2 or 3, where n^A is such that component (A) of formula (I) is uncharged;

R^{1A} to R^{5A} are identical or different, and are each independently of one another, hydrogen,

C_1-C_{22}-alkyl, 5- to 7-membered cycloalkyl or cycloalkenyl which optionally bear C_1-C_{10}-alkyl groups as substituents, C_2-C_{22}-alkenyl, C_6-C_{22}-aryl, C_7-C_{40}-arylalkyl, C_7-C_{40}-alkylaryl, $-NR^{8A}_2$, $-N(SiR^{8A}_3)_2$, $-OR^{8A}$, $-OSiR^{8A}_3$, $-SiR^{8A}_3$, where the radicals R^{1A} to R^{5A} may optionally be substituted by at least one halogen, or two radicals R^{1A} to R^{5A}, in particular adjacent radicals, together with the atoms connecting them are joined to form a five-, six- or seven-membered ring, or a five-, six- or seven-membered heterocycle comprising at least one atom selected from the group consisting of N, P, O and S;

R^{8A} are identical or different, and are each independently of one another, C_1-C_{10}-alkyl, C_3-C_{10}-cycloalkyl, C_6-C_{15}-aryl, C_1-C_4-alkoxy, or C_6-C_{10}-aryloxy; and

Z^A is as defined for X^A, or is



,

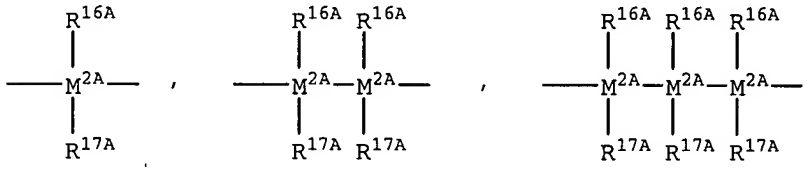
where

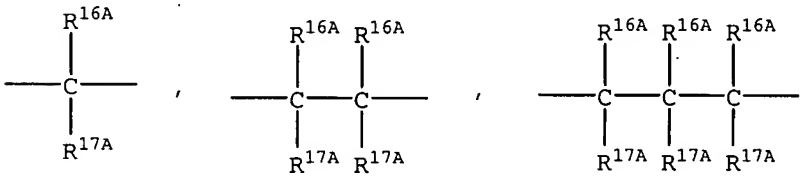
R^{9A} to R^{13A} are identical or different, and are each independently of one another, hydrogen, C_1-C_{22}-alkyl, 5- to 7-membered cycloalkyl or cycloalkenyl which optionally bear C_1-C_{10}-alkyl groups as substituents, C_2-C_{22}-alkenyl, C_6-C_{22}-aryl, C_7-C_{40}-arylalkyl, C_7-C_{40}-alkylaryl, $-NR^{14A}_2$, $-N(SiR^{14A}_3)_2$, $-OR^{14A}$, $-OSiR^{14A}_3$, or -

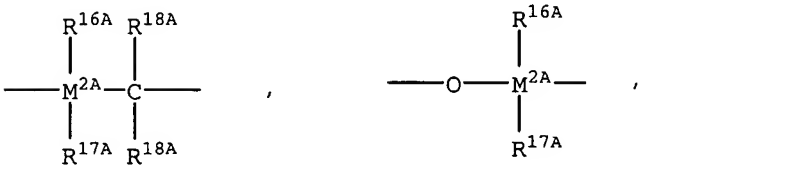
SiR^{14A}_3, where R^{9A} to R^{13A} may also be substituted by halogen, and/or two radicals R^{9A} to R^{13A} together with the atoms connecting them may be joined to form a five-, six- or seven-membered ring, or a five-, six- or seven-membered heterocycle comprising at least one atom selected from the group consisting of N, P, O and S;

R^{14A} are identical or different, and are each independently of one another, C_1-C_{10}-alkyl, C_3-C_{10}-cycloalkyl, C_6-C_{15}-aryl, C_1-C_4-alkoxy, or C_6-C_{10}-aryloxy,or R^{4A} and Z^A together form an $-R^{15A}_vA-A^A-$ group, where

R^{15A} is







$-BR^{16A}-$, $-(BNR^{16A}R^{17A})-$, $-AlR^{16A}-$, -Ge- , -Sn- , -O- , -S- , -SO- , $-SO_2-$, $-NR^{16A}-$, -CO- , $-PR^{16A}-$ or $-(POR^{16A})-$,

where

R^{16A}, R^{17A} and R^{18A} are identical or different, and are each independently of one another, hydrogen, halogen, a trimethylsilyl group, a C_1-C_{10}-alkyl group, a C_1-C_{10}-fluoroalkyl group, a C_6-C_{10}-fluoroaryl group, a C_6-C_{10}-aryl group, a C_1-C_{10}-alkoxy group, a C_7-C_{15}-alkylaryloxy group, a C_2-C_{10}-alkenyl group, a C_7-C_{40}-arylalkyl group, a C_8-C_{40}-arylalkenyl group, or a C_7-C_{40}-alkylaryl group, or two adjacent radicals together with the atoms connecting them form a saturated or unsaturated ring having from 4 to 15 carbon atoms;

M^{2A} is silicon, germanium, or tin;

A^A is -O- , -S- , $-NR^{19A}$- , $-PR^{19A}$- , $-O-R^{19A}$, $-NR^{19A}_2$, $-PR^{19A}_2$, or an unsubstituted, substituted or fused, heterocyclic ring system, where

R^{19A} are identical or different, and are each independently of one another, C_1-C_{10}-alkyl, C_6-C_{15}-aryl, C_3-C_{10}-cycloalkyl, C_7-C_{18}-alkylaryl, or $-Si(R^{20A})_3$;

R^{20A} is hydrogen, C_1-C_{10}-alkyl, C_6-C_{15}-aryl which optionally bear C_1-C_4-alkyl groups as substituents, or C_3-C_{10}-cycloalkyl; and

v^A is 1 or, if A^A is an unsubstituted,

substituted or fused, heterocyclic ring system, 1 or 0

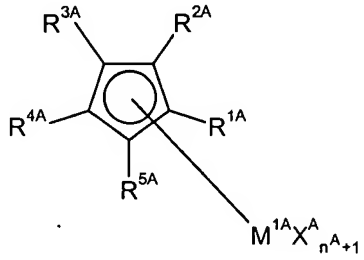
or R^{4A} and R^{12A} together form $-R^{15A}-$.

32. (Previously presented) The process for preparing a catalyst solid for olefin polymerization as claimed in claim 31, wherein

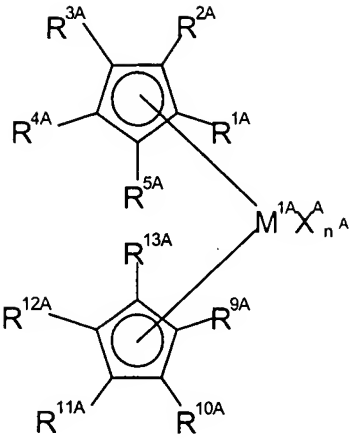
X^A are identical, and are fluorine, chlorine, bromine, C_1-C_7-alkyl or arylalkyl, or two X^A together form, a 1,3-diene ligand, or a biaryloxy group; and

M^{2A} is silicon.

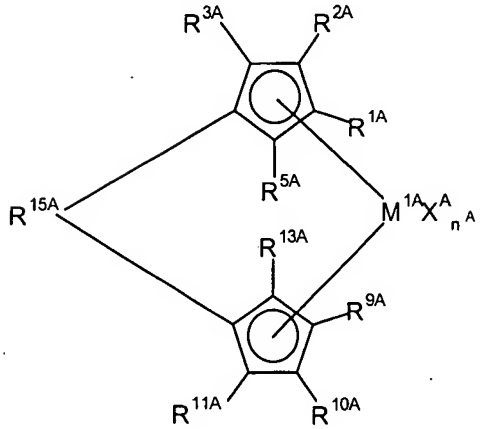
33. (Previously presented) The process for preparing a catalyst solid for olefin polymerization as claimed in claim 31, wherein the compound of formula (I) is selected from the group consisting of



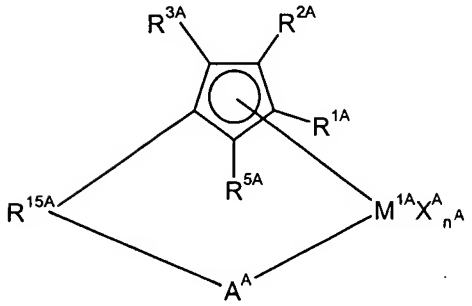
(Ia),



(Ib),



(Ic) and



(Id)

wherein in formula (Ia)

M^{1A} is titanium or chromium;

X^A is chlorine, C_1-C_4-alkyl, phenyl, alkoxy, or aryloxy;

n^A is 1 or 2; and

R^{1A} to R^{5A} are each hydrogen, or C_1-C_4-alkyl, or two adjacent R^{1A} to R^{5A} radicals together with the

atoms connecting them form a substituted or unsubstituted, unsaturated six-membered ring;

wherein in formula (Ib)

M^{1A} is titanium, zirconium, hafnium, or chromium;

X^A is chlorine, C_1-C_4-alkyl, or benzyl, or two X^A radicals form a substituted or unsubstituted butadiene ligand;

n^A is 1 or 2, with the proviso that if M^{1A} is chromium, then n^A is 0;

R^{1A} to R^{5A} are each hydrogen, C_1-C_8-alkyl, C_6-C_{10}-aryl, $-NR^{8A}_2$, $-OSiR^{8A}_3$, $-SiR^{8A}_3$, or $-Si(R^{8A})_3$; and

R^{9A} to R^{13A} are each hydrogen, C_1-C_8-alkyl, C_6-C_{10}-aryl, $-NR^{8A}_2$, $-OSiR^{8A}_3$, $-SiR^{8A}_3$, or $-Si(R^{8A})_3$;

or two R^{1A} to R^{5A} radicals and/or two R^{9A} to R^{13A} radicals together with the cyclopentadienyl ring form an indenyl or substituted indenyl system;

wherein in formula (Ic)

R^{1A} and R^{9A} are identical or different, and are each independently of one another, hydrogen, or a C_1-C_{10}-alkyl group;

R^{5A} and R^{13A} are identical or different, and are each independently of one another, hydrogen, methyl, ethyl, isopropyl, or tert-butyl;

R^{3A} and R^{11A} are each C_1-C_4-alkyl; and

R^{2A} and R^{10A} are each hydrogen; or two adjacent R^{2A} and R^{3A} radicals, or two R^{10A} and R^{11A} radicals together form a saturated or unsaturated cyclic group comprising from 4 to 44 carbon atoms;

R^{15A} is $-M^{2A}R^{16A}R^{17A}-$, $-CR^{16A}R^{17A}-CR^{16A}R^{17A}-$, $-BR^{16A}-$,

or $-BNR^{16A}R^{17A}-$;

M^{1A} is titanium, zirconium, or hafnium; and

X^A are identical or different and are each chlorine, C_1-C_4-alkyl, benzyl, phenyl, or C_7-C_{15}-alkylaryloxy;

wherein in formula (Id)

M^{1A} is titanium, or zirconium;

X^A is chlorine, C_1-C_4-alkyl, or phenyl, or two X radicals together form a substituted or unsubstituted butadiene ligand;

R^{15A} is $-SiR^{16A}R^{17A}-$, or $-CR^{16A}R^{17A}-CR^{16A}R^{17A}-$; and

A^A is -O- , -S-, or $-NR^{19A}-$;

R^{1A} to R^{3A} and R^{5A} are each hydrogen, C_1-C_{10}-alkyl, C_3-C_{10}-cycloalkyl, C_6-C_{15}-aryl, or $-Si(R^{8A})_3$, or two adjacent radicals form a cyclic group comprising from 4 to 12 carbon atoms.

34. (Previously presented) The process for preparing a catalyst solid for olefin polymerization as claimed in claim 29, wherein the component (A) is
bis(cyclopentadienyl)zirconium dichloride,
bis(pentamethylcyclopentadienyl)zirconium dichloride,
bis(methylcyclopentadienyl)zirconium dichloride,
bis(ethylcyclopentadienyl)zirconium dichloride,
bis(n-butylcyclopentadienyl)zirconium dichloride,
bis(1-n-butyl-3-methylcyclopentadienyl)zirconium dichloride,
bis(indenyl)zirconium dichloride,
bis(tetrahydroindenyl)zirconium dichloride,
bis(trimethylsilylcyclopentadienyl)zirconium dichloride,

bis(cyclopentadienyl)zirconium dimethyl,
bis(pentamethylcyclopentadienyl)zirconium dimethyl,
bis(methylcyclopentadienyl)zirconium dimethyl,
bis(ethylcyclopentadienyl)zirconium dimethyl,
bis(n-butylcyclopentadienyl)zirconium dimethyl,
bis(1-n-butyl-3-methylcyclopentadienyl)zirconium dimethyl,
bis(indenyl)zirconium dimethyl,
bis(tetrahydroindenyl)zirconium didimethyl,
bis(trimethylsilylcyclopentadienyl)zirconium dimethyl,
dimethylsilanediyl(2-methyl-4-phenylindenyl)-(2,5-dimethyl-N-phenyl-4-azapentalene)zirconium dichloride,
dimethylsilanediylbis(2-methyl-4-phenyl-4-hydroazulenyl)zirconium dichloride,
dimethylsilanediylbis(2-ethyl-4-phenyl-4-hydroazulenyl)zirconium dichloride,
dimethylsilanediylbis(cyclopentadienyl)zirconium dichloride,
dimethylsilanediylbis(indenyl)zirconium dichloride,
dimethylsilanediylbis(tetrahydroindenyl)zirconium dichloride,
ethylenebis(cyclopentadienyl)zirconium dichloride,
ethylenebis(indenyl)zirconium dichloride,
ethylenebis(tetrahydroindenyl)zirconium dichloride,
tetramethylethylene-9-fluorenylcyclopentadienylzirconium dichloride,
dimethylsilanediylbis(3-tert-butyl-5-methylcyclopentadienyl)zirconium dichloride,
dimethylsilanediylbis(3-tert-butyl-5-ethylcyclopentadienyl)zirconium dichloride,
dimethylsilanediylbis(2-methylindenyl)zirconium dichloride,
dimethylsilanediylbis(2-isopropylindenyl)zirconium dichloride,
dimethylsilanediylbis(2-tert-butylindenyl)zirconium dichloride,
diethylsilanediylbis(2-methylindenyl)zirconium dibromide,

dimethylsilanediylbis(3-methyl-5-methylcyclopentadienyl)zirconium dichloride,
dimethylsilanediylbis(3-ethyl-5-isopropylcyclopentadienyl)zirconium dichloride,
dimethylsilanediylbis(2-ethylindenyl)zirconium dichloride,
dimethylsilanediylbis(2-methyl-4,5-benzindenyl)zirconium dichloride
dimethylsilanediylbis(2-ethyl-4,5-benzindenyl)zirconium dichloride
methylphenylsilanediylbis(2-methyl-4,5-benzindenyl)zirconium dichloride,
methylphenylsilanediylbis(2-ethyl-4,5-benzindenyl)zirconium dichloride,
diphenylsilanediylbis(2-methyl-4,5-benzindenyl)zirconium dichloride,
diphenylsilanediylbis(2-ethyl-4,5-benzindenyl)zirconium dichloride,
diphenylsilanediylbis(2-methylindenyl)hafnium dichloride,
dimethylsilanediylbis(2-methyl-4-phenylindenyl)zirconium dichloride,
dimethylsilanediylbis(2-ethyl-4-phenylindenyl)zirconium dichloride,
dimethylsilanediylbis(2-methyl-4-(1-naphthyl)indenyl)zirconium dichloride,
dimethylsilanediylbis(2-ethyl-4-(1-naphthyl)indenyl)zirconium dichloride,
dimethylsilanediylbis(2-propyl-4-(1-naphthyl)indenyl)zirconium dichloride,
dimethylsilanediylbis(2-i-butyl-4-(1-naphthyl)indenyl)zirconium dichloride,
dimethylsilanediylbis(2-propyl-4-(9-phenanthryl)indenyl)zirconium dichloride,
dimethylsilanediylbis(2-methyl-4-isopropylindenyl)zirconium dichloride,

dimethylsilanediylbis(2,7-dimethyl-4-isopropylindenyl)zirconium dichloride, dimethylsilanediylbis(2-methyl-4,6-diisopropylindenyl)zirconium dichloride, dimethylsilanediylbis(2-methyl-4-[p-trifluoromethylphenyl]indenyl)zirconium dichloride, dimethylsilanediylbis(2-methyl-4-[3',5'-dimethylphenyl]indenyl)zirconium dichloride, dimethylsilanediylbis(2-methyl-4-[4'-tert-butylphenyl]indenyl)zirconium dichloride, diethylsilanediylbis(2-methyl-4-[4'-tert-butylphenyl]indenyl)zirconium dichloride, dimethylsilanediylbis(2-ethyl-4-[4'-tert-butylphenyl]indenyl)zirconium dichloride, dimethylsilanediylbis(2-propyl-4-[4'-tert-butylphenyl]indenyl)zirconium dichloride, dimethylsilanediylbis(2-isopropyl-4-[4'-tert-butylphenyl]indenyl)zirconium dichloride, dimethylsilanediylbis(2-n-butyl-4-[4'-tert-butylphenyl]indenyl)zirconium dichloride, dimethylsilanediylbis(2-hexyl-4-[4'-tert-butylphenyl]indenyl)zirconium dichloride, dimethylsilanediyl(2-isopropyl-4-phenylindenyl)-(2-methyl-4-phenylindenyl)zirconium dichloride, dimethylsilanediyl(2-isopropyl-4-(1-naphthyl)indenyl)-(2-methyl-4-(1-naphthyl)indenyl)zirconium dichloride, dimethylsilanediyl(2-isopropyl-4-[4'-tert-butylphenyl]indenyl)-(2-methyl-4-[4'-tert-butylphenyl]-indenyl)zirconium dichloride, dimethylsilanediyl(2-isopropyl-4-[4'-tert-butylphenyl]indenyl)-(2-ethyl-4-[4'-tert-butylphenyl]-indenyl)zirconium dichloride, dimethylsilanediyl(2-isopropyl-4-[4'-tert-butylphenyl]indenyl)-(2-methyl-4-[3',5'-bis-tert-

butylphenyl]indenyl)zirconium dichloride,
dimethylsilanediyl(2-isopropyl-4-[4'-tert-butylphenyl]indenyl)-(2-methyl-4-[1'-naphthyl]indenyl)-zirconium dichloride,
ethylene(2-isopropyl-4-[4'-tert-butylphenyl]indenyl)-(2-methyl-4-[4'-tert-butylphenyl]indenyl)zirconium dichloride,
di(2,6-di-i-propylphenyl)-2,3-dimethyldiazabutadienepalladium dichloride,
di(di-i-propylphenyl)-2,3-dimethyldiazabutadienenickel dichloride,
di(2,6-di-i-propylphenyl)-2,3-dimethyldiazabutadienedimethylpalladium,
di(2,6-di-i-propylphenyl)-2,3-dimethyldiazabutadienedimethylnickel,
di(2,6-dimethylphenyl)-2,3-dimethyldiazabutadienepalladium dichloride,
di(2,6-dimethylphenyl)-2,3-dimethyldiazabutadienenickel dichloride,
di(2,6-dimethylphenyl)-2,3-dimethyldiazabutadienedimethylpalladium,
di(2,6-dimethylphenyl)-2,3-dimethyldiazabutadienedimethylnickel,
di(2-methylphenyl)-2,3-dimethyldiazabutadienepalladium dichloride,
di(2-methylphenyl)-2,3-dimethyldiazabutadienenickel dichloride,
di(2-methylphenyl)-2,3-dimethyldiazabutadienedimethylpalladium,
di(2-methylphenyl)-2,3-dimethyldiazabutadienedimethylnickel,
diphenyl-2,3-dimethyldiazabutadienepalladium dichloride,
diphenyl-2,3-dimethyldiazabutadienenickel dichloride,
diphenyl-2,3-dimethyldiazabutadienedimethylpalladium,
diphenyl-2,3-dimethyldiazabutadienedimethylnickel,
di(2,6-dimethylphenyl)azanaphthenepalladium dichloride,

di(2,6-dimethylphenyl)azanaphthenenickel dichloride,
di(2,6-dimethylphenyl)azanaphthenedimethylpalladium,
di(2,6-dimethylphenyl)azanaphthenedimethylnickel,
1,1'-bipyridylpalladium dichloride,
1,1'-bipyridylnickel dichloride,
1,1'-bipyridyldimethylpalladium,
1,1'-bipyridyldimethylnickel,
1-(8-quinolyl)-2-methyl-4-
methylcyclopentadienylchromium(III) dichloride,
1-(8-quinolyl)-3-isopropyl-5-
methylcyclopentadienylchromium(III) dichloride,
1-(8-quinolyl)-3-tert-butyl-5-
methylcyclopentadienylchromium(III) dichloride,
1-(8-quinolyl)-2,3,4,5-
tetramethylcyclopentadienylchromium(III) dichloride,
1-(8-quinolyl)tetrahydroindenylchromium(III) dichloride,
1-(8-quinolyl)indenylchromium(III) dichloride,
1-(8-quinolyl)-2-methylindenylchromium(III) dichloride,
1-(8-quinolyl)-2-isopropylindenylchromium(III) dichloride,
1-(8-quinolyl)-2-ethylindenylchromium(III) dichloride,
1-(8-quinolyl)-2-tert-butylindenylchromium(III) dichloride,
1-(8-quinolyl)benzindenylchromium(III) dichloride,
1-(8-quinolyl)-2-methylbenzindenylchromium(III) dichloride,
1-(8-(2-methylquinolyl))-2-methyl-4-
methylcyclopentadienylchromium(III) dichloride,
1-(8-(2-methylquinolyl))-2,3,4,5-
tetramethylcyclopentadienylchromium(III) dichloride,
1-(8-(2-methylquinolyl))tetrahydroindenylchromium(III)
dichloride,
1-(8-(2-methylquinolyl))indenylchromium(III) dichloride,
1-(8-(2-methylquinolyl))-2-methylindenylchromium(III)
dichloride,
1-(8-(2-methylquinolyl))-2-isopropylindenylchromium(III)
dichloride,

1-(8-(2-methylquinolyl))-2-ethylindenylchromium(III) dichloride,
1-(8-(2-methylquinolyl))-2-tert-butylindenylchromium(III) dichloride,
1-(8-(2-methylquinolyl))benzindenylchromium(III) dichloride,
1-(8-(2-methylquinolyl))-2-methylbenzindenylchromium(III) dichloride,
[1,3,5-tri(methyl)-1,3,5-triazacyclohexane]chromium trichloride,
[1,3,5-tri(ethyl)-1,3,5-triazacyclohexane]chromium trichloride,
[1,3,5-tri(octyl)-1,3,5-triazacyclohexane]chromium trichloride,
[1,3,5-tri(dodecyl)-1,3,5-triazacyclohexane]chromium trichloride,
[1,3,5-tri(benzyl)-1,3,5-triazacyclohexane]chromium trichloride, or mixtures thereof.

35. (Previously presented) The process for preparing a catalyst solid for olefin polymerization as claimed in claim 21, wherein said organometallic compound of formula (V) is n-butyllithium, n-butyl-n-octylmagnesium, n-butyl-n-heptylmagnesium, triphenylaluminum, triisoprenaluminum, tri-n-octylaluminum, tri-n-hexylaluminum, tri-n-butylaluminum, triisobutylaluminum, tri-n-propylaluminum, tri-isopropylaluminum, triethylaluminum, trispentafluorophenylborane, trimethylaluminum, or mixtures thereof.

36. (Previously presented) The process for preparing a catalyst solid for olefin polymerization as claimed in claim 34, wherein said organometallic compound of formula (V) is n-butyllithium, n-butyl-n-octylmagnesium, n-butyl-n-heptylmagnesium, triphenylaluminum, triisoprenaluminum, tri-

n-octylaluminum, tri-n-hexylaluminum, tri-n-butylaluminum, triisobutylaluminum, tri-n-propylaluminum, tri-isopropylaluminum, triethylaluminum, trispentafluorophenylborane, trimethylaluminum, or mixtures thereof.

37. (Previously presented) The process for preparing a catalyst solid for olefin polymerization as claimed in claim 21, wherein said organometallic compound of formula (V) is at least one borinic acid of formula $R^4{}_2B(OH)$, or at least one boronic acid of formula $R^4B(OH)_2$.

38. (Previously presented) The process for preparing a catalyst solid for olefin polymerization as claimed in claim 21, wherein said Lewis base is methylamine, aniline, dimethylamine, diethylamine, N-methylaniline, diphenylamine, trimethylamine, triethylamine, tripropylamine, tributylamine, N,N-dimethylaniline, N,N-diethylaniline, N,N-dimethylcyclohexylamine, benzylamine, N-benzyldimethylamine, N-benzyldiethylamine, N-benzylbutylamine, N-benzyl-tert-butylamine, N'-benzyl-N,N-dimethylethylenediamine, N-benzylethylenediamine, N-benzylisopropylamine, N-benzylmethylamine, N-benzylethylamine, N-benzyl-1-phenylethylamine, N-benzyl-2-phenylethylamine, N-benzylpiperazine, or mixtures thereof.

39. (Previously presented) The process for preparing a catalyst solid for olefin polymerization as claimed in claim 37, wherein said Lewis base is methylamine, aniline, dimethylamine, diethylamine, N-methylaniline, diphenylamine, trimethylamine, triethylamine, tripropylamine, tributylamine, N,N-dimethylaniline, N,N-diethylaniline, N,N-dimethylcyclohexylamine, benzylamine, N-benzyldimethylamine, N-benzyldiethylamine, N-benzylbutylamine, N-benzyl-tert-

butylamine, N'-benzyl-N,N-dimethylethylenediamine, N-benzylethylenediamine, N-benzylisopropylamine, N-benzylmethylamine, N-benzylethylamine, N-benzyl-1-phenylethylamine, N-benzyl-2-phenylethylamine, N-benzylpiperazine, or mixtures thereof.

40. (New) The process for preparing a catalyst solid for olefin polymerization as claimed in claim 21, wherein in formula (V)

M^1 is lithium, boron, magnesium, or aluminum; and

R^1, R^2, and R^3 are each a C_1-C_{10}-alkyl.